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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

GONZALEZ, JULIO C

ART UNIT PAPER NUMBER

2834

DATE MAILED: 07/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/600,827

Applicant(s)

SCHMIDT ET AL.

Examiner

Julio C. Gonzalez

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show how the connecting flange would make the combustion engine or the transmission retrofitable such that the whole automatic transmission may be replaced as described in the specification, mainly in claim 5. Also, the drawings fail to show how the motors and generators are connected and how the connecting flange may be able to replace the automatic transmission. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to under 37 CFR 1.83(b) because they are incomplete. 37 CFR 1.83(b) reads as follows:

When the invention consists of an improvement on an old machine the drawing must when possible exhibit, in one or more views, the improved portion itself, disconnected from the old structure, and also in another view, so much only of the old structure as will suffice to show the connection of the invention therewith.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance .

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first motor underneath the first and second generator and the second electrical motor next to the first electrical motor and underneath the first and second generator as disclosed in claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claim discloses that the connecting flange and/or the electrical transmission may be replaced. The claim and the specifications are not clear enough as to how the transmission or the connecting flange may replace a transmission.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3, the claim discloses a first motor underneath the first and second generator. It is also disclosed that a second motor is underneath the first and second motor. From the claim, it would seem like if two motors are beneath the first generator and another two additional motors are beneath the second generator. In total, it would seem like if there are four motors in total disclosed in claim 3. Also, how are the generators and motors connected? The claims and specifications do not specify as to how these components are connected to one another nor how the two motors next to each other are connected and the relationship of the motors with the generators? About the connecting flange, is it between the combustion

engine and the generators or is the step-up gear between the combustion engine and the generators?

What is meant by the two motors been "a summator gear train"? Are the motors part of the gears? Are the motors an extension of the step-down and step-up gears?

In claim 5, what is meant by the connecting flange, between the engine and the generators "for retrofittably connecting the internal combustion engine to the electrical transmission to replace an existing automatic transmission". Is the automatic transmission been replaced by the connecting flange? Can the connecting flange perform the functions of a transmission? What is meant by the "electrical transmission"? Is the automatic transmission an "electrical transmission"? How is the automatic transmission been replaced? Is another new automatic transmission replacing the old automatic transmission?

In order to advance prosecution in the merits, the Prior Art will be applied as best understood by the examiner.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowlett in view of Shamoto et al and Brusaglino et al and ordinary skill in the art.

Rowlett discloses an electrical transmission having a generator 16 and a motor 18 underneath the generator (see figure 1). Moreover, a reduction gear 34 is disclosed.

However, Rowlett does not disclose having a motor next to another motor.

On the other hand, Shamoto et al discloses for the purpose of providing a higher energy efficiency apparatus for engines, a first motor MG2 next to a second motor MG1 (see figure 1).

However, neither Rowlett nor Shamoto disclose explicitly the use of a second generator and gears.

On the other hand, Brusaglino et al discloses for the purpose of minimizing pollutant content of exhaust gases, a first and second generators 5, 5a connected to motors 7, 7a. Also, the generators are connected to combustion engine 2 through a gear 9 and a gear 8 is connected to the motor 7 (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design an electrical transmission as disclosed by Rowlett and to modify the invention by placing two motors next to each other for

the purpose of providing a higher energy efficiency apparatus for engines as disclosed by Shamoto et al and to include gears for the purpose of minimizing pollutant content of exhaust gases as disclosed by Brusaglino et al.

Also, Rowlett, Shamoto et al and Brusaglino et al disclose the claimed invention except for duplicating the number of motors from two motors to four motors. It would have been obvious to one having ordinary skill in the art at the time the invention was made to design an apparatus by duplicating the number of motors, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rowlett in view of Shamoto et al, Brusaglino et al and ordinary skill in the art as applied to claim 3 above, and further in view of Tury.

The combined transmission discloses all of the elements above. However, the combined transmission does not disclose a transmission wherein certain parts are retrofittable.

On the other hand, Tury discloses for the purpose of providing precise and inexpensive shifting device for a transmission, a controller transmission 30 having retrofittable connections 110, 114, 116 (see figure 1). Other devices that function

in combination with the transmission and have retrofittable connections are the motor 42 and solenoid 36 (see figures 3, 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined transmission as disclosed above and to use retrofittable devices in combination with a transmission for the purpose of providing precise and inexpensive shifting device for a transmission as disclosed by Tury.

Response to Arguments

1. Applicant's arguments with respect to claim 5 have been considered but are moot in view of the new ground(s) of rejection.
2. Applicant's arguments filed 05/06/02 have been fully considered but they are not persuasive.

Shamoto et al discloses motors MG1, MG2. Such two motors are placed next to each other and also Shamoto et al teaches that such motors may function as generators (see abstract). Moreover, Shamoto et al discloses having the two motor or generators next to gear 120 which has a flange 124 and such gear is connected between the motor or generators and the combustion engine 150 (see figure 16).

Also, Shamoto teaches that both motors or generators are connected to the same output shaft of the combustion engine (see figure 16).

The reference still read on the claims since there is no structure disclosed in the claims as to how are the motors connected to the generators or how is the step-down gear connected to the motor and the generators. The claims only recite a step-down gear arranged downstream from the motor. Other gears may be placed to a side of the motor and yet function with other parts of the vehicle that are not related to the motors.

3. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the first and second generator coupled to the same output shaft) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

4. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one

of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Rowlett, Brusaglino et al and Shamoto et al disclose material related to vehicle transmission and improvements to such vehicle are available to anyone with ordinary skill in the art.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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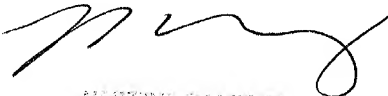
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Jcg

July 24, 2002


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